

REMARKS

Claims 1, 5, 7, 17, 18, 36 and 38 are pending in the current application. Claim 1 is an independent claim. No new matter has been added. In view of the following remarks, favorable reconsideration and allowance of the present application is respectfully requested.

Initially, Applicants appreciate the Examiner's indication that the formal drawings filed on September 28, 2001 and January 3, 2002 have been accepted.

I. 35 U.S.C. §103(a) REJECTION – MARTIN AND ARNDT

Claims 1, 5, 7, 17, 18, 36 and 38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Martin, U.S. Patent No. 5,796,848 in view of Arndt et al. (hereinafter "Arndt"), U.S. Patent No. 6,421,448. Applicants respectfully traverse the rejection.

i. THE COMBINATION OF MARTIN AND ARNDT

Applicants disagree that one of ordinary skill in the art is motivated to start from the Martin reference and combine the teachings of Arndt to arrive at independent claim 1. The Arndt reference discloses a hearing aid with a directional microphone, and does not address any of the technical problems addressed by Martin.

Applicants submit that nothing in Arndt would motivate one of ordinary skill in the art to provide a filter means between the preamplifier 8 and the sigma-delta modulator 7 in the microphone taught by Martin.

Referring to Fig. 1 of Arndt, Applicants submit that the Arndt does not disclose an analog-to-digital converter, much less a sigma-delta modulator. Thus, one would not be motivated to position a "filter means preventing low frequency components from reaching the sigma-delta modulator" as recited in independent claim 1.

Furthermore, Arndt teaches a signal processing unit 5 positioned after the signal pre-amplifying unit 4. Arndt further teaches that the high pass filters 3 and 3' are positioned upstream of the signal pre-amplifying unit 4. Therefore, Applicants submit that Arndt fails to teach a "filter means in the signal path between the pre-amplifier and the sigma-delta modulator" as recited in independent claim 1.

In addition, as shown in Fig. 2 of Arndt, Applicants submit that Arndt fails to teach or suggest an analog-to-digital converter, much less a sigma-delta modulator. Furthermore, Applicants submit that the high pass filters 3 and 3' are not positioned inside the microphone assemblies 2 and 2' as indicated by the dash line surrounding elements S, C3, R5, R6 and 12, respectively.

Thus, Arndt fails to teach, or suggest, high pass filters located between the signal pre-amplifying unit 4 and the signal processing unit 5 within the microphone assembly casing, as similarly recited in independent claim 1.

Accordingly, Applicants submit that Martin in view of Arndt fails to teach or disclose "the microphone assembly further comprises filter means in the signal path between the pre-amplifier and the sigma-delta modulator, the filter means preventing low frequency components from reaching the sigma-delta modulator" as recited in independent claim 1.

CONCLUSION

Accordingly, in view of the above, reconsideration of the rejection and allowance of each of claims 1, 5, 7, 17, 18, 36 and 38 in connection with the present application is earnestly solicited.

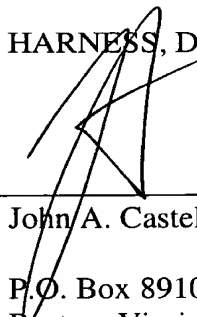
Should there be any matters that need to be resolved in the present application; the Examiner is respectfully requested to contact the undersigned at the telephone number below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By


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